

## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



Sand Pond Association
Mr. Mike Descoteau
PO Box 315
Spofford, New Hampshire 03462

April 19, 2002 Letter of Deficiency DAM #152.08

RE: Sand Pond Dam, Marlow

Dear Mr. Descoteau:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on November 1, 2001. During this visual inspection and/or file review, the following deficiencies were observed:

Brush and tree growth along the crest and downstream face of the dam appeared to be cut annually with some re-growth occurring at this time. Mr. Descoteau indicated that the brush was cut annually;

- 2. Three large trees within 10 feet of the toe of the dam were observed and should be removed. Two of the trees were located to the left of the low-level outlet section and one tree was at the right side of the low-level outlet section;
- 3. There was debris along the downstream face of the dam (previous tree removal program remains);
- 4. Substantial seepage was observed through the stone face near the low-level outlet section along with two areas of depression at the top of the dam. One of the depressions was reportedly excavated by Mr. Descoteau to locate the source of the seepage. Mr. Descoteau indicated that the digging in this area was very difficult and could not be advanced further than several inches below the surface due to boulders. On this date the seepage appeared clear with flow reduced due to lower water conditions. Mr. Descoteau indicated that he located several areas along the upstream face of the dam of which seepage was entering. It should also be noted that seepage was observed exiting the stone masonry wall along the upstream face within the stoplog and low-level outlet section. The following areas are reportedly were the seepage was entering dam:
  - a. 5 feet left of the left concrete wall to the stoplog bay;
  - b. 30 feet left of the left concrete wall to the stoplog bay;
  - c. 10 feet right of the right concrete wall to the stoplog bay; and

5 There was no operational procedure plan on file with DES.

TDD Access: Relay NH -800-735-2964

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DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

## July 1, 2002:

- 1. Remove the three large trees growing within 5 to 10 feet of the downstream toe of the dam as indicated above on the left and right side of the low-level outlet section.
- 2. Remove the debris from the downstream slope/face of the dam that appears to be from a previous tree removal program.
- 3. Prepare and submit to DES a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel.

## September 1, 2002:

4. Formulate a plan to repair/reduce the seepage exiting through the dam as indicated above by December 1, 2003.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Dale F. Guinn, P.E. Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13

cc: Gretchen Rule

Town of Marlow

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